

WHAT IS CLAIMED IS

1. In an automatic analyzing system which includes a carry line for carrying a sample rack from a rack sending unit to a rack recovery unit and analyzes samples by using a plurality of analyzing apparatuses which are disposed along the carry line, wherein each of the analyzing apparatuses includes a reaction unit, a sample dispensing unit for dispensing the sample on the sample rack into the reaction unit and a reagent supply unit for supplying reagents corresponding to an analysis item to the reaction unit, the automatic analyzing system comprising:

a reagent shortage detection unit for detecting that one of the reagents of the reagent supply units of the analyzing apparatuses is shortage;

reagent shortage occurrence display means which notifies the shortage of the one reagent in response to that the reagent shortage detection unit detects that the one reagent of the analyzing apparatuses is shortage; and

control separation means for separating from the control of the automatic analyzing system, the analyzing apparatus in which the one reagent is shortage, in accordance with reagent shortage detection information from the reagent shortage detection unit.

2. An automatic analyzing system according to claim 1, further comprising

a mechanism which instructs the control separation means to separate from the control of the automatic

analyzing system, the analyzing apparatus in which the one reagent is shortage only when one of particular reagents being registered in advance is detected to be shortage.

3. An automatic analyzing system according to claim 1 or 2, further comprising

a new reagent detection unit which detects the one reagent detected as being shortage is newly set at the analyzing apparatus in which the shortage of the one reagent occurred, and

a mechanism which instructs the control separation means to stop the separation from the control to restore the automatic analyzing apparatus to the control under the analyzing system in accordance with the detection of the setting of the new reagent by the new reagent detection unit.

4. An automatic analyzing system according to claim 2, further comprising

a register unit for registering a particular reagent.

5. An automatic analyzing system according to claim 1, further comprising

a mechanism which returns the sample rack having not been analyzed on the analyzing apparatus in which the one reagent is shortage to the carry line, before the control separation means separates from the control of the automatic analyzing system, the analyzing apparatus in which the one

reagent is shortage.

6. An automatic analyzing system according to claim 1, further comprising

a buffer which can place the sample to be analyzed by the analyzing apparatus separated from the analyzing system in a stand-by state, without stopping the analysis of the entire system during a time period where the reagent to be replaced is set to the analyzing apparatus separated from the analyzing system.

7. An automatic analyzing system according to claim 3, further comprising

a mechanism which automatically measures a remaining amount of the reagent replaced in the analyzing apparatus separated from the analyzing system before the analyzing apparatus separated from the analyzing system restores to the analyzing system.

8. An automatic analyzing system according to claim 3, further comprising

a mechanism which automatically confirms before the analyzing apparatus separated from the automatic analyzing system restores to the analyzing system whether or not the reagent replaced in the analyzing apparatus separated from the automatic analyzing system coincides with an item for measurement relating to the one reagent detected to be shortage, wherein when the reagent replaced does not

coincide with the item, the analyzing apparatus is not restored to the automatic analyzing system.

9. An automatic analyzing system according to claim 1, further comprising

means which makes it possible to determine a reagent to be exchanged by notifying an identifier of the one reagent detected to be shortage and that the analyzing apparatus is automatically separated from the control of the automatic analyzing system.

10. An automatic analyzing system according to claim 9, further comprising

means which makes it possible to identify the one reagent to be exchanged by automatically confirming before restoring the analyzing apparatus separated from the automatic analyzing system to the automatic analyzing system and notifying an identifier of the one reagent detected to be shortage.